

REMARKS / DISCUSSION OF ISSUES

Drawing

The drawings have been labeled as requested by the Examiner.

Claim 20

Claim 20 has been amended as requested by the Examiner. Applicants respectfully submit that this amendment is purely typographical in nature and does not affect the scope of the claim.

Art rejections

The art rejections are respectfully traversed.

Since the references are complex, Applicant will confine his remarks to those portions of the references cited by the Examiner, except as otherwise indicated. Applicant makes no representation as to the contents of other portions of the references.

Any of the Examiner's rejections and/or points of argument that are not addressed below would appear to be moot in view of the following. Nevertheless, Applicant reserves the right to respond to those rejections and arguments and to advance additional arguments at a later date. No arguments are waived and none of the Examiner's statements are conceded.

Spiro/Kawakatsu combination

The independent claims both recite a layer on a bulb of a lamp.

Spiro relates to a coating on a reflector for a lamp that reflects both visible and infrared. Applicant accordingly respectfully submits that Spiro is not relevant art.

Kawakatsu relates to a coating on a lamp. This coating is stated to transmit in the visible spectrum and transmit in the infrared.

Applicant does not pretend to have invented the general concept of interference filters in this application. The several documents of record here show that interference filters of many different sorts are known. Each one, though, is a highly optically complicated assembly of layers of precisely determined thicknesses

calculated to have particular optical properties over a range of wavelengths. Each filter may have dozens of layers. Each layer has its own distinct thickness, measured to the 10^{-10} m or even 10^{-11} m, as shown in the various documents. Changing any one of these many layers could have unforeseen effects on the optical or mechanical properties of the whole. Moreover, the placement of a filter on a reflector away from the bulb would have unpredictable optical and mechanical results when compared with placing the same filter on the surface of the bulb.

One of ordinary skill in the art would not, therefore, be motivated to combine filters with two such different functions. Any hypothetical combination of the two would not work without undue experimentation. This combination could therefore only be arrived at through impermissible hindsight in view of Applicants claims and disclosure.

Claim 1

This claim recites a protective layer. The layer is recited to reduce thermal and/or intrinsic stress.

The Examiner points to certain layers as allegedly being protective in Spiro. The Examiner says that the outer layer in table 1 is protective, but it is only 2% thicker than the next thickest layer, which in turn is only very slightly thicker than the next thickest layer. Accordingly, there is no reason to suppose, without any further indication in the text that the outermost layer is particularly protective, as opposed to having some desired optical properties. The Examiner says that protection is "inherent," but Applicant sees no reason to assume so, given the relatively small differences in thicknesses. Moreover, given that the materials are on a reflector, and not so close to the source of heat as if they were on the bulb, there is no teaching or suggestion of how these layers might function mechanically on the bulb.

Applicant has searched both the Spiro and Kawakatsu documents online for the word "stress" and does not find this word in the text of either document. Applicant accordingly respectfully submits that one of ordinary skill in the art would not look to either of these documents in an effort to solve problems relating to stress. Spiro refers to thermal and mechanical stability in a vague manner which is at best

an invitation to invent.

Applicant accordingly respectfully submits that the Examiner has not made a *prima facie* case against the independent claims.

Nevertheless, Applicant has added claims 23 and 24, per p.7, I.7 & p.8, I.11 of the specification giving a proposed lower bound on the size of the protective layer – in addition to the upper bound – which is not taught or suggested in the references.

Applicant respectfully submits that he has addressed each issue raised by the Examiner — except for any that were skipped as moot — and that the application is accordingly in condition for allowance. In view of the foregoing, Applicant respectfully requests) that the Examiner withdraw the objections and/or rejections of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

/Anne E. Barschall/

ANNE E. BARSCHALL
Reg. 31,089
Att'y for Applicant(s)

80 BENEDICT AVE
TARRYTOWN NY 10591
Phone: (914)-332-1019
Fax: (914)-332-7719